CLAIMS

WHAT IS CLAIMED:

1. A sizing device that is adapted to be coupled to a prepared end of a femur, comprising:

a body having a bottom surface; and

a movable stylus operatively coupled to said body, said stylus having a tip, wherein said stylus is coupled to said body such that said tip may be moved in a direction that is approximately perpendicular to a plane containing said bottom surface.

2. The device of claim 1, wherein said body further comprises a plurality of protruding feet, each of which is adapted to engage a posterior portion of a femoral condyle.

3. The device of claim 1, wherein said stylus further comprises a shaft that is coupled to said tip, said device further comprising a handle that is operatively coupled to said shaft of said stylus such that said tip of said stylus may be rotated by rotating said handle.

4. The device of claim 1, wherein said tip of said stylus is also movable in a direction that is substantially parallel to said plane containing said bottom surface.

5. The device of claim 1, wherein said stylus further comprises a shaft that is coupled to said tip, wherein said shaft of said stylus is positioned in a sleeve and said sleeve is coupled to a movable cradle assembly, wherein said tip of said stylus is also movable in a

direction that is substantially parallel to said plane containing said bottom surface of said body by moving said cradle assembly.

6. The device of claim 1, wherein said stylus further comprises a shaft that is coupled to said tip, wherein said shaft of said stylus is positioned in a sleeve and said sleeve is coupled to a movable cradle assembly that is coupled to said body by a plurality of shafts, each of said shafts coupled to said cradle assembly being adapted to slide within an opening formed in said body, wherein said tip of said stylus is also movable in a direction that is substantially parallel to said plane containing said bottom surface of said body by moving said cradle assembly.

7. The device of claim 1, wherein said stylus has a shaft that is coupled to said tip, said device further comprising:

a cradle assembly, comprising:

a cross-member;

a plurality of shafts coupled to said cross-member, each of said shafts coupled to said cross-member being slidably positioned within an opening formed in said body; and

a sleeve that is pivotally coupled to said cross-member, said shaft of said stylus being positioned within said sleeve.

8. The device of claim 7, wherein said shafts coupled to said cross-member have a plurality of size gradation marks positioned thereon.

9. The device of claim 1, wherein said stylus has a shaft that is coupled to said tip, said device further comprising:

a cradle assembly, comprising:

a cross-member;

a plurality of shafts coupled to said cross-member, each of said shafts coupled to said cross-member being slidably positioned within an opening formed in said body; and

a sleeve that is coupled to said cross-member, said shaft of said stylus being positioned within said sleeve.

10. The device of claim 1, further comprising a plurality of retractable nails positioned in said body wherein, when said nails are in the retracted position, the nails do not extend beyond said bottom surface of said body.

11. The device of claim 1, further comprising a plurality of individually positionable drill guides coupled to said body.

12. The device of claim 11, wherein each of said drill guides is adapted to provide a guide for a femur post hole to be formed in a femur.

13. The device of claim 11, wherein each of said individually positionable drill guides is positioned on a movable body that is positioned in a recess formed in a top surface of said body.

14. A sizing device that is adapted to be coupled to a prepared end of a femur, comprising:

a body having a bottom surface;

a movable cradle assembly, comprising:

a cross-member; and

a plurality of shafts slidingly coupling said cross-member to said body; and

a stylus operatively coupled to said cross-member.

15. The device of claim 14, wherein each of said shafts is adapted to slide within an opening formed in said body.

16. The device of claim 14, wherein said stylus has a tip, and wherein said tip is adapted to be moved in a direction that is approximately parallel to a plane containing said bottom surface of said cradle assembly relative to said body.

17. The device of claim 15, wherein said stylus comprises a tip, and wherein said tip is adapted to be moved in a direction that is approximately parallel to a plane containing said bottom surface by movement of said shafts coupled to said cross-member within said openings in said body.

18. The device of claim 14, wherein said tip may be moved in a direction that is approximately perpendicular to a plane containing said bottom surface.

19. The device of claim 14, wherein said body further comprises a plurality of protruding feet, each of which is adapted to engage a posterior portion of a femoral condyle.

20. The device of claim 14, wherein said stylus further comprises:

a tip;

a shaft that is coupled to said tip; and

a handle that is operatively coupled to said shaft of said stylus such that said tip of said stylus may be rotated by rotating said handle.

21. The device of claim 14, wherein said stylus further comprises:

a tip;

a shaft that is coupled to said tip; and

a sleeve that is pivotally coupled to said cross-member, wherein said shaft of said stylus is positioned in said sleeve.

22. The device of claim 14, wherein said shafts slidingly coupled to said cross-member have a plurality of size gradation marks positioned thereon.

23. The device of claim 14, further comprising a plurality of retractable nails at least partially received within said body wherein, when said nails are in the retracted position, the nails do not extend beyond said bottom surface of said body.

24. The device of claim 14, further comprising a plurality of individually positionable drill guides coupled to said body.

25. The device of claim 24, wherein each of said drill guides is adapted to provide a guide for a femur post hole to be formed in a femur.

26. The device of claim 24, wherein each of said individually positionable drill guides is positioned on a movable body that is positioned in a recess formed in a top surface of said body.

27. A sizing device that is adapted to be coupled to a prepared end of a femur, comprising:

a body having a bottom surface;

a stylus having a tip; and

means for moving said tip in a direction that is approximately perpendicular to a plane containing said bottom surface of said body.

28. The device of claim 27, further comprising means for moving said tip in a direction that is approximately parallel to said plane containing said bottom surface.

29. The device of claim 27, wherein said body further comprises a plurality of protruding feet, each of which is adapted to engage a posterior portion of a femoral condyle.

30. The device of claim 27, wherein said means for moving said tip in a direction that is approximately perpendicular to said plane containing said bottom surface of said body comprises:

a sleeve that is adapted to have said stylus positioned therein, said sleeve having an axis that is positioned approximately perpendicular to said plane containing said bottom surface of said body; and

a handled coupled to said stylus.

31. The device of claim 28, wherein said means for moving said tip in a direction that is approximately parallel to said plane containing said bottom surface of said body comprises:

a cradle assembly, comprising:

a cross-member, said stylus being operatively coupled to said cross-member; and

a plurality of shafts coupled to said cross-member, each of said shafts coupled to said cross-member being slidably positioned within an opening formed in said body.

32. The device of claim 27, further comprising a plurality of retractable nails at least partially received within said body wherein, when said nails are in the retracted position, the nails do not extend beyond said bottom surface of said body.

33. The device of claim 27, further comprising a plurality of individually positionable drill guides coupled to said body.

34. A device that is adapted to be coupled to a prepared surface of a femur, comprising:

a body having a bottom surface;

an opening formed in said body;

a movable tube positioned in said body; and

a retractable nail at least partially positioned within said tube, said nail having a shoulder, said nail being adapted to be urged to a position such that an end of said nail extends beyond said bottom surface of said body.

35. The device of claim 34, further comprising a retaining ring positioned in a recess formed in said body adjacent said bottom surface of said body, said ring being adapted to engage a bottom surface of said shoulder on said nail.

36. The device of claim 34, wherein said tube has an internal shoulder that is adapted to engage an upper surface of said shoulder on said nail.

37. The device of claim 34, wherein said tube has an external shoulder that is adapted to engage an internal shoulder formed in said opening in said body.

38. The device of claim 34, further comprising a plurality of individually positionable drill guides coupled to said body.

39. The device of claim 38, wherein each of said drill guides is adapted to provide a guide for a femur post hole to be formed in a femur.

40. The device of claim 38, wherein each of said individually positionable drill guides is positioned on a movable body that is positioned in a recess formed in a top surface of said body.

41. A device that is adapted to be coupled to a prepared surface of a femur, comprising:

a body having a bottom surface;

an opening formed in said body, said opening having an internal shoulder;

a movable tube positioned in said opening in said body, said tube having an internal shoulder and an external shoulder; and

a retractable nail at least partially positioned within said tube, said nail having a shoulder with a top surface and a bottom surface, said nail being adapted to be urged to a position such that an end of said nail extends beyond said bottom surface of said body, wherein said top surface of said shoulder on said nail is adapted to engage said internal shoulder on said tube, and said external shoulder on said tube is adapted to engage said internal shoulder of said opening.

42. The device of claim 41, further comprising a retaining ring positioned in a recess formed in said body adjacent said bottom surface of said body, said ring being adapted to engage said bottom surface of said shoulder on said nail.

43. The device of claim 41, further comprising a plurality of individually positionable drill guides coupled to said body.

44. The device of claim 43, wherein each of said drill guides is adapted to provide a guide for a femur post hole to be formed in a femur.

45. The device of claim 43, wherein each of said individually positionable drill guides is positioned on a movable body that is positioned in a recess formed in a top surface of said body.

46. A device that is adapted to be coupled to a prepared surface of a femur, comprising:

a body having a bottom surface; and

a plurality of individually positionable drill guides coupled to said body, wherein each of said drill guides may be individually positioned independently of the position of any other drill guide.

47. The device of claim 46, wherein each of said drill guides is adapted to provide a guide for a femur post hole to be formed in a femur.

48. The device of claim 46, wherein each of said individually positionable drill guides is positioned on a movable body that is positioned in a recess formed in a top surface of said body.

49. A method, comprising:

making an incision in a patient's knee;

attaching a femoral implant sizing guide to a prepared surface of a femur of said patient, said sizing guide having:

a body having a bottom surface; and

a movable stylus with a tip;

after said sizing guide is attached to said prepared surface of said femur, moving said tip of said stylus in both a direction that is approximately perpendicular to a plane containing said bottom surface of said sizing device and in a direction that is approximately parallel to said plane containing said bottom surface to position said tip of said stylus at a location proximate an anterior cortex region of said femur; and

determining a size of a femoral knee prosthesis to be positioned on said femur.

50. The method of claim 49, further comprising attaching said femoral prosthesis of said determined size to said femur.

51. The method of claim 49, further comprising rotating said tip of said stylus.

52. The method of claim 49, wherein said femoral implant sizing guide further comprises a plurality of individually positionable femur post hole guides, and wherein the method further comprises:

positioning said individually positionable femur post hole guides at a desired location; and

drilling femur post holes in said femur through said individually positionable post hole guides.

53. A method, comprising:

making an incision in a patient's knee;

attaching a femoral implant sizing guide to a prepared surface of a femur of said patient, said sizing guide having:

a body having a bottom surface;

a cradle assembly, comprising:

a cross-member; and

a plurality of shafts slidingly coupling said cross-member to said body; and

a movable stylus operatively coupled to said cross-member, said stylus having a tip;

after said sizing guide is attached to said prepared surface of said femur, moving said cross-member relative to said body to thereby move said tip of said stylus in a direction that is approximately parallel to a plane containing said bottom surface of said sizing guide to position said tip of said stylus at a location proximate an anterior cortex of said femur; and

determining a size of a femoral knee prosthesis to be positioned on said femur.

54. The method of claim 53, further comprising attaching said femoral prosthesis of said determined size to said femur.

55. The method of claim 53, further comprising rotating said tip of said stylus.

56. The method of claim 53, wherein said femoral implant sizing guide further comprises a plurality of individually positionable femur post hole guides, and wherein the method further comprises:

positioning said individually positionable femur post hole guides at a desired location; and

drilling femur post holes in said femur through said individually positionable post hole guides.

57. A method, comprising:

making an incision in a patient's knee;

attaching a femoral implant drill guide to a prepared surface of a femur of said patient, said drill guide having a plurality of individually positionable femur post hole drill guides;

individually positioning at least one of said femur post hole drill guides at a desired location; and

drilling femur post holes in said femur through said individually positioned post hole guides.

58. The method of claim 57, wherein each of said individually positionable femur post hole drill guides is positionable for locating said femur post holes at a neutral or a 3 degree external rotation position.

59. The method of claim 57, wherein both of said individually positionable femur post hole guides are positioned at a desired location.